less than 10°.

2. TRICK MOVEMENTS - are the substitute movement used by an individual to carry out desired movement when the prime movers are weak, fatigue, paralyzed or painful.

eg - The ~~th~~ hitching of the shoulder by the trapezius muscle occur when Supraspinatus muscle is inflamed or the deltoid is paralysed.

* Advantage -

1. Trick movement occur where prime movers are weak or paralysed & other muscles take over their function.

2. So person can do his work & disability is minimized.

16/2

* Disadvantage -

1. Trick movement may affect the normal function of prime movers when it recovers.

Scanned with ACE Scanner

2. Can produced abnormal joint movement.
3. Excessive strain on muscle and ligament can occur.

* Type – 2 type
1. Direct guide movement - a) by alternate prime movers
   b) By fixators.
2. By alternating position of favorably placed muscle.
3. By making use of whole limb pattern.

1. By alternate prime movers :- Here, the movement occur due to action of another Prime mover which produce the same movement in different direction.

eg - In case of weak supinator muscle, pt performs the movement with the help of biceps brachii but there will be associated elbow flexion.

2. By fixators - In this fixator muscle moves the origin of muscle to produce the action of prime mover.

eg - pt with weak hip abductor will use lateral abdominal muscle to lift the pelvis & thus move his lower limb laterally to give apperance of hip abduction.

3. By alternating position of favorably placed muscles - In this a favorable muscle may contract & place the joint in an alternate position, so that other muscle in alternate position can perform the desired movement.

Scanned with ACE Scanner

Date 19/6/21
Page

2. Indirect Trick Movements :-

1. By tendon Action :- In this antagonist of weak muscle contract to produce an opp. movement, there is shortening of the tendon which gives a stretch to weak muscles & produce movement with stretch reflex.

→ This is due to the passive action of Prime movers. It occurs in muscles which cross two joints & have normally a limited length.

eg- pt with paralysis of long flexors of the fingers wrist hyper extension cause a tendon action at distal interphangeal joints.

2. By Rebound Phenomenon :- when resistance is given to antagonist muscle contraction & if he resistance is suddenly removed or strong contraction of antagonist followed by gentle relaxation Produces a sustained movement and a seeming contraction in agonist.

eg- if elbow extensors are weak, then resistance is given to elbow flexion movement & when this resistance is removed suddenly, the limb will move to & fro producing elbow flexion & extension.

3. By Assistance of gravity - In this pt alters the position of body, make use of gravity & assist weak muscles.

eg- pt with triceps paralysis where elbow easily be extended by the help of gravity if shoulder is below 90° position.

Scanned with ACE Scanner